

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 09/016,1590  
Source: 1FW16  
Date Processed by STIC: 3/10/05

# ***ENTERED***



IFW16

## RAW SEQUENCE LISTING

DATE: 03/10/2005

PATENT APPLICATION: US/09/016,159D

TIME: 10:17:03

Input Set : D:\completeseq2.txt

Output Set: N:\CRF4\03102005\I016159D.raw

3 <110> APPLICANT: Lee, Jong Y.  
 5 <120> TITLE OF INVENTION: PURIFIED HUMAN ERYTHROPOIETIN RECEPTOR PROTEIN FRAGMENT AND  
 6 ANTIBODIES DERIVED THEREFROM  
 8 <130> FILE REFERENCE: 106.001US2  
 10 <140> CURRENT APPLICATION NUMBER: US 09/016,159D  
 11 <141> CURRENT FILING DATE: 1998-01-30  
 13 <150> PRIOR APPLICATION NUMBER: US 08/876,227  
 14 <151> PRIOR FILING DATE: 1997-06-16  
 16 <160> NUMBER OF SEQ ID NOS: 7  
 18 <170> SOFTWARE: PatentIn version 3.3  
 20 <210> SEQ ID NO: 1  
 21 <211> LENGTH: 23  
 22 <212> TYPE: DNA  
 23 <213> ORGANISM: Artificial  
 25 <220> FEATURE:  
 26 <223> OTHER INFORMATION: BamH1 linker at 5' end followed by sequence for amino acids  
 25 through 29 of full length EpoR protein. Forward primer for SEQ  
 27 ID NO:2.  
 28  
 30 <400> SEQUENCE: 1  
 31 ttggatccgc gccccgcct aac 23  
 34 <210> SEQ ID NO: 2  
 35 <211> LENGTH: 22  
 36 <212> TYPE: DNA  
 37 <213> ORGANISM: Artificial  
 39 <220> FEATURE:  
 40 <223> OTHER INFORMATION: EcoR1 linker followed by sequence complementary to coding  
 41 sequence for amino acids 226 through 222 of full length human  
 42 EpoR protein. Reverse primer for SEQ ID NO:1.  
 44 <400> SEQUENCE: 2  
 45 tgaattcggg gtccaggctg ct 22  
 48 <210> SEQ ID NO: 3  
 49 <211> LENGTH: 18  
 50 <212> TYPE: DNA  
 51 <213> ORGANISM: Homo sapiens  
 53 <300> PUBLICATION INFORMATION:  
 54 <301> AUTHORs: Smith, D.B. et al.  
 55 <302> TITLE: Single-step purification of polypeptides expressed in Escherichia  
 56 coli as fusions with glutathione-S-transferase  
 57 <303> JOURNAL: Gene  
 58 <304> VOLUME: 67  
 59 <306> PAGES: 31-40  
 60 <307> DATE: 1998  
 62 <300> PUBLICATION INFORMATION:

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63 <301> AUTHORS: Smith, D.B. et al.
64 <302> TITLE: Single-step purification of polypeptides expressed in Escherichia
65      coli as fusions with glutathione-S-transferase
66 <303> JOURNAL: Genes and Development
67 <304> VOLUME: 67
68 <306> PAGES: 31-40
69 <307> DATE: 1998
71 <400> SEQUENCE: 3
72 ctgggttccgc gtggatcc
75 <210> SEQ ID NO: 4
76 <211> LENGTH: 1527
77 <212> TYPE: DNA
78 <213> ORGANISM: Homo sapiens
80 <300> PUBLICATION INFORMATION:
81 <301> AUTHORS: Jones, S.S. et al.
82 <302> TITLE: Human Erythropoietin Receptor: Cloning, expression, and
83      biological characterization
84 <303> JOURNAL: Blood
85 <304> VOLUME: 76
86 <305> ISSUE: 1
87 <306> PAGES: 31-35
88 <307> DATE: 1990-07-01
90 <400> SEQUENCE: 4
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95 ttgctggcgg cccggggggcc cgaagagctt ctgtgcttca ccgagcgggt ggaggacttg
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101 ggtgcggtgc gcttctggtg ttcgctgcct acagccgaca cgtcgagctt cgtgccctta
103 gaggttgcgc tcacagcagc ctccggcgct ccgcgatatc accgtgtcat ccacatcaat
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107 cacgtagtgt tgcgctggct cccgcccgcct gagacacca tgacgtctca catccgctac
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137 gactctggca tctcaactga ctacagctca ggggactccc agggagccca agggggctta
139 tccgatggcc cctactccaa cccttatgag aacagcctta tcccagccgc tgagcctctg
141 ccccccagct atgtggcttg ctcttag

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144 <210> SEQ ID NO: 5
145 <211> LENGTH: 508
146 <212> TYPE: PRT
147 <213> ORGANISM: Homo sapiens
149 <300> PUBLICATION INFORMATION:
150 <301> AUTHORS: Jones, S.S. et al.
151 <302> TITLE: Human Erythropoietin Receptor: Cloning, expression, and
152       biological characterization
153 <303> JOURNAL: Blood
154 <304> VOLUME: 76
155 <305> ISSUE: 1
156 <306> PAGES: 31-35
157 <307> DATE: 1990-07-01
159 <400> SEQUENCE: 5
161 Met Asp His Leu Gly Ala Ser Leu Trp Pro Gln Val Gly Ser Leu Cys
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165 Leu Leu Leu Ala Gly Ala Ala Trp Ala Pro Pro Pro Asn Leu Pro Asp
166       20           25           30
169 Pro Lys Phe Glu Ser Lys Ala Ala Leu Leu Ala Ala Arg Gly Pro Glu
170       35           40           45
173 Glu Leu Leu Cys Phe Thr Glu Arg Leu Glu Asp Leu Val Cys Phe Trp
174       50           55           60
177 Glu Glu Ala Ala Ser Ala Gly Val Gly Pro Gly Asn Tyr Ser Phe Ser
178 65           70           75           80
181 Tyr Gln Leu Glu Asp Glu Pro Trp Lys Leu Cys Arg Leu His Gln Ala
182       85           90           95
185 Pro Thr Ala Arg Gly Ala Val Arg Phe Trp Cys Ser Leu Pro Thr Ala
186       100          105          110
189 Asp Thr Ser Ser Phe Val Pro Leu Glu Leu Arg Val Thr Ala Ala Ser
190       115          120          125
193 Gly Ala Pro Arg Tyr His Arg Val Ile His Ile Asn Glu Val Val Leu
194       130          135          140
197 Leu Asp Ala Pro Val Gly Leu Val Ala Arg Leu Ala Asp Glu Ser Gly
198 145          150          155          160
201 His Val Val Leu Arg Trp Leu Pro Pro Pro Glu Thr Pro Met Thr Ser
202       165          170          175
205 His Ile Arg Tyr Glu Val Asp Val Ser Ala Gly Asn Gly Ala Gly Ser
206       180          185          190
209 Val Gln Arg Val Glu Ile Leu Glu Gly Arg Thr Glu Cys Val Leu Ser
210       195          200          205
213 Asn Leu Arg Gly Arg Thr Arg Tyr Thr Phe Ala Val Arg Ala Arg Met
214       210          215          220
217 Ala Glu Pro Ser Phe Gly Gly Phe Trp Ser Ala Trp Ser Glu Pro Val
218 225          230          235          240
221 Ser Leu Leu Thr Pro Ser Asp Leu Asp Pro Leu Ile Leu Thr Leu Ser
222       245          250          255
225 Leu Ile Leu Val Val Ile Leu Val Leu Leu Thr Val Leu Ala Leu Leu
226       260          265          270
229 Ser His Arg Arg Ala Leu Lys Gln Lys Ile Trp Pro Gly Ile Pro Ser

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230          275          280          285
233 Pro Glu Ser Glu Phe Glu Gly Leu Phe Thr Thr His Lys Gly Asn Phe
234          290          295          300
237 Gln Leu Trp Leu Tyr Gln Asn Asp Gly Cys Leu Trp Trp Ser Pro Cys
238 305          310          315          320
241 Thr Pro Phe Thr Glu Asp Pro Pro Ala Ser Leu Glu Val Leu Ser Glu
242          325          330          335
245 Arg Cys Trp Gly Thr Met Gln Ala Val Glu Pro Gly Thr Asp Asp Glu
246          340          345          350
249 Gly Pro Leu Leu Glu Pro Val Gly Ser Glu His Ala Gln Asp Thr Tyr
250          355          360          365
253 Leu Val Leu Asp Lys Trp Leu Leu Pro Arg Asn Pro Pro Ser Glu Asp
254          370          375          380
257 Leu Pro Gly Pro Gly Gly Ser Val Asp Ile Val Ala Met Asp Glu Gly
258 385          390          395          400
261 Ser Glu Ala Ser Ser Cys Ser Ser Ala Leu Ala Ser Lys Pro Ser Pro
262          405          410          415
265 Glu Gly Ala Ser Ala Ala Ser Phe Glu Tyr Thr Ile Leu Asp Pro Ser
266          420          425          430
269 Ser Gln Leu Leu Arg Pro Trp Thr Leu Cys Pro Glu Leu Pro Pro Thr
270          435          440          445
273 Pro Pro His Leu Lys Tyr Leu Tyr Leu Val Val Ser Asp Ser Gly Ile
274          450          455          460
277 Ser Thr Asp Tyr Ser Ser Gly Asp Ser Gln Gly Ala Gln Gly Gly Leu
278 465          470          475          480
281 Ser Asp Gly Pro Tyr Ser Asn Pro Tyr Glu Asn Ser Leu Ile Pro Ala
282          485          490          495
285 Ala Glu Pro Leu Pro Pro Ser Tyr Val Ala Cys Ser
286          500          505
289 <210> SEQ ID NO: 6
290 <211> LENGTH: 1527
291 <212> TYPE: DNA
292 <213> ORGANISM: Homo sapiens
294 <300> PUBLICATION INFORMATION:
295 <301> AUTHORS: Winkelman, J.C. et al.
296 <302> TITLE: The gene for the human erythropoietin receptor: analysis of the
297 coding sequence and assignment to chromosome 19p
298 <303> JOURNAL: Blood
299 <304> VOLUME: 76
300 <305> ISSUE: 1
301 <306> PAGES: 24-30
302 <307> DATE: 1990-07-01
304 <400> SEQUENCE: 6
305 atggaccacc tcggggcgct cctctggccc caggtcggct ccctttgtct cctgctcgct 60
307 ggggccgcct gggcgccccc gcctaacctc ccggacccca agttcgagag caaagcggcc 120
309 ttgctggcgg cccgggggcc cgaagagctt ctgtgcttca ccgagcgggt ggaggacttg 180
311 gtgtgtttct gggaggaagc ggcgagcgct ggggtgggcc cgggcaacta cagcttctcc 240
313 taccagctcg aggatgagcc atggaagctg tgcgcctgc accaggctcc cacggctcgt 300
315 ggtcgggtgc gcttctggtg ttcgctgcct acagccgaca cgtcgagctt cgtgcccta 360

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317 gagttgcgcg tcacagcagc ctccggcgct ccgcgatatc accgtgtcat ccacatcaat 420
319 gaagtagtgc tcctagacgc ccccggtgggg ctggtggcgc ggttggctga cgagagcggc 480
321 cacgtagtgt tgcgctggct cccgcccgcct gagacaccca tgacgtctca catccgctac 540
323 gaggtggacg tctcggccgg caaccggcca gggagcgtac agaggggtga gatcctggag 600
325 ggccgcaccg agtgtgtgct gagcaacctg cggggccgga cgcgctacac cttcgccgtc 660
327 cgcgcgcgta tggctgagcc gagcttcggc ggcttctgga gcgcctggtc ggagcctgtg 720
329 tcgctgctgg agcctagcga cctggacccc ctcatcctga cgctctccct catcctcgtg 780
331 gtcacctcgtg tgctgctgac cgtgctcgcg ctgctctccc accgccgggc tctgaagcag 840
333 aagatctggc ctggcatccc gagcccagag agcagagttg aaggcctctt caccaccac 900
335 aagggtaaact tccagctgtg gctgtaccag aatgatggct gcctgtggtg gagccccctg 960
337 acccccttca cggaggaccc acctgcttcc ctggaagtcc tctcagagcg ctgctggggg 1020
339 acgatgcagg cagtggagcc ggggacagat gatgagggcc ccctgctgga gccagtgggc 1080
341 agtgagcatg cccaggatac ctatctggtg ctggacaaat ggttgcctgc ccggaacccg 1140
343 cccagtgagg acctcccagg gcctgggtggc agtgtggaca tagtggccat ggatgaaggc 1200
345 tcagaagcat cctcctgctc atctgctttg gcctcgaagc ccagcccaga gggagcctct 1260
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349 ctgtgccctg agctgcccc taccaccacc cacctaaagt acctgtacct tgtggtatct 1380
351 gactctggca tctcaactga ctacagctca ggggactccc agggagccca agggggctta 1440
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355 ccccccagct atgtggcttg ctcttag 1527

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358 &lt;210&gt; SEQ ID NO: 7

359 &lt;211&gt; LENGTH: 508

360 &lt;212&gt; TYPE: PRT

361 &lt;213&gt; ORGANISM: Homo sapiens

363 &lt;300&gt; PUBLICATION INFORMATION:

364 &lt;301&gt; AUTHORS: Winkelmann, J.C. et al.

365 <302> TITLE: The Gene for the Human Erythropoietin Receptor: Analysis of the  
 366 coding sequence and assignment to chromosome 19p

367 &lt;303&gt; JOURNAL: Blood

368 &lt;304&gt; VOLUME: 76

369 &lt;305&gt; ISSUE: 1

370 &lt;306&gt; PAGES: 24-30

371 &lt;307&gt; DATE: 1990-07-01

373 &lt;400&gt; SEQUENCE: 7

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375 Met Asp His Leu Gly Ala Ser Leu Trp Pro Gln Val Gly Ser Leu Cys
376 1 5 10 15
379 Leu Leu Leu Ala Gly Ala Ala Trp Ala Pro Pro Pro Asn Leu Pro Asp
380 20 25 30
383 Pro Lys Phe Glu Ser Lys Ala Ala Leu Leu Ala Ala Arg Gly Pro Glu
384 35 40 45
387 Glu Leu Leu Cys Phe Thr Glu Arg Leu Glu Asp Leu Val Cys Phe Trp
388 50 55 60
391 Glu Glu Ala Ala Ser Ala Gly Val Gly Pro Gly Asn Tyr Ser Phe Ser
392 65 70 75 80
395 Tyr Gln Leu Glu Asp Glu Pro Trp Lys Leu Cys Arg Leu His Gln Ala
396 85 90 95
399 Pro Thr Ala Arg Gly Arg Val Arg Phe Trp Cys Ser Leu Pro Thr Ala
400 100 105 110
403 Asp Thr Ser Ser Phe Val Pro Leu Glu Leu Arg Val Thr Ala Ala Ser

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RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 03/10/2005  
PATENT APPLICATION:    US/09/016,159D      TIME: 10:17:04

Input Set : D:\completeseq2.txt  
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Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2

**VERIFICATION SUMMARY**

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